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PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM,
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*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: TREATMENT OF NEUROLOGICAL DISORDERS BY DSRNA ADMINISTRATION

(57) Abstract: The present invention relates to methods to treat neurological disorders comprising intrathecal injection of an effective amount of a double-stranded (ds) RNA into a subject in need, wherein said dsRNA inhibits the expression of a target gene and to pharmaceutical compositions useful for such treatment.

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INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/713 A61P25/28 A61P25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, EMBASE, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03 070895 A (MC SWIGGEN JAMES ; BEIGELMAN LEONID (US); RIBOZYME PHARM INC (US)) 28 August 2003 (2003-08-28) claims 1-32 page 84, line 15	1,2, 7-13,15
P,X	WO 02 067858 A (UNIV MARYLAND ; DORSEY SUSAN G (US); KRUEGER BRUCE K (US); BAMBRICK) 6 September 2002 (2002-09-06) claims 53,54 page 7, paragraph 13 -page 8, paragraph 16 page 13, paragraph 41 page 23, paragraph 75	1,2,7-10

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- *G* document member of the same patent family

Date of the actual completion of the international search

5 December 2003

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29/12/2003

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/09787

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	XIA H ET AL: "siRNA-mediated gene silencing in vitro and in vivo" NATURE BIOTECHNOLOGY, NATURE PUBLISHING, US, vol. 20, no. 10, October 2002 (2002-10), pages 1006-1010, XP002251054 ISSN: 1087-0156 the whole document ---	1,7,8,10
X	EP 0 308 066 A (HEM RES INC) 22 March 1989 (1989-03-22) claims 1,7-9 ---	1,2,7-10
Y	G. DORN ET AL: "Specific Inhibition of the Rat Ligand-Gated Ion Channel P2X3 Function Via Methoxyethoxy-Modified Phosphorothioated Antisense Oligonucleotides" ANTISENSE AND NUCLEIC ACID DRUG DEVELOPMENT, vol. 11, 2001, pages 165-174, XP002264064 abstract page 167; table 1 ---	1-20
Y	CAPLEN NATASHA J ET AL: "Specific inhibition of gene expression by small double-stranded RNAs in invertebrate and vertebrate systems" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 98, no. 17, 14 August 2001 (2001-08-14), pages 9742-9747, XP002206452 ISSN: 0027-8424 abstract page 9747 ---	1-20
A	MIYAGISHI MAKOTO ET AL: "U6 promoter-driven siRNAs with four uridine 3' overhangs efficiently suppress targeted gene expression in mammalian cells" NATURE BIOTECHNOLOGY, NATURE PUBLISHING, US, vol. 20, no. 5, May 2002 (2002-05), pages 497-500, XP002245728 ISSN: 1087-0156 the whole document ---	1-20
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INTERNATIONAL SEARCH REPORT

Inter. Application No.
PCT/EP 03/09787

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	B. A. CHIZH ET AL: "P2X Receptors and Nociception" PHARMACOLOGICAL REVIEWS, vol. 53, no. 4, 2000, pages 553-568, XP002264065 page 565, left-hand column, line 3 -right-hand column, line 29 page 566, left-hand column, paragraph VI ----	1-20
A	GAN L ET AL: "Specific interference of gene function by double-stranded RNA in neuronal cell lines" ABSTRACTS OF THE SOCIETY FOR NEUROSCIENCE, SOCIETY FOR NEUROSCIENCE, WASHINGTON, DC, US, vol. 27, no. 2, 2001, page 2051 XP002259262 ISSN: 0190-5295 abstract -----	1-20
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/09787

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 1-15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal Application No

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Information on patent family members

International application No

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